

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed November 12, 2008. Upon entry of the amendments in this response, claims 15 – 19, 21 – 27, 29, and 31 – 38 remain pending. In particular, Applicants amend claims 15, 19, 26, 32, and 37 – 38 and cancel claim 20 without prejudice, waiver, or disclaimer. Applicants cancel claim 20 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Allowed Subject Matter

The Office Action indicates that claims 19 – 20, 15 – 25, 35, and 36 are allowable if amended to overcome the cited objections and/or 35 U.S.C. §112 rejections. Applicants sincerely appreciate this indication of allowable subject matter.

II. Claim Objections

The Office Action objects to claims 15 – 27, 29, 31, 35 – 36, and 38 for various informalities. Applicants amend claims 15, 19, 26, and 38 and cancel claim 20. Applicants submit that these amendments overcome the objection and that claims 15 – 27, 29, 31, 35 – 36, and 38 are allowable.

Additionally, the Office Action argues that Applicants identified element 200 of FIG. 7 as the data integrity supervisor and requests that Applicant identify “means for monitoring” and means for generating”, as recited in claim 26. In the response filed October 2, 2008, Applicants merely indicated a nonlimiting example of where the specification supports the disputed claim

term. The Office Action assertion (or implication) that this correlation is the only place the specification supports this claim element is not accurate.

Further, with regard to the request for Applicants to identify the “means for monitoring” and the “means for generating,” Applicants respectfully that, as a nonlimiting example, “means for monitoring” includes the structural “signal integrity monitor,” as recited in claim 26. Additionally, the signal integrity monitor is disclosed multiple places in the written description (e.g., element 80). With regard to the “means for generating,” a nonlimiting example of corresponding structure includes data supervisor 200, such as in FIG. 7.

Applicants additionally remind the examiner that, as stated in MPEP §2163(A) “[t]here is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976) (“we are of the opinion that the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims”). Accordingly, as these claim elements are so clearly disclosed in the written description, and the Office Action has failed to present any evidence of why these claim terms are not adequately supported, the Office Action has failed to meet this burden.

III. Rejections Under 35 U.S.C. §112

The Office Action indicates that claims 19 – 20 stand rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. More specifically, the Office Action alleges that claims 19 – 20 are incomplete for allegedly “omitting essential structural cooperative relationships of elements” (OA page 3, line 6). The Office Action then refers to MPEP §2172.02 for support of this argument. Applicants respectfully disagree. More specifically, MPEP §2172.02 states “[i]n addition, a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under

35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention” (emphasis added). As clearly illustrated in this passage, Applicants are required to interrelate essential elements as defined by the specification. First, Applicants have not indicated (in the specification or elsewhere) that either the “first monostable circuit” or the “second monostable circuit” are “essential.” Second, even if Applicants had made such an indication, there is absolutely no requirement that Applicants make a “structural cooperative relationship” of these elements as asserted by the Office Action. The only requirement is that the “essential” elements be “interrelated.” As claims 19 – 20 indicate that the clock detector comprises the “first monostable circuit” and the “second monostable circuit,” it is clear that these elements are interrelated, as required by MPEP §2172.02 and 35 U.S.C. §112. For at least these reasons, Applicants traverse this rejection and submit that claims 19 – 20 are allowable.

IV. Rejections Under 35 U.S.C. §103

A. Claim 32 is Allowable Over *Seiichi* in view of *Gunderson*

The Office Action indicates that claim 32 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A (“*Seiichi*”) in view of U.S. Patent Number 4,029,913 (“*Gunderson*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Gunderson* fails to disclose, teach, or suggest all of the elements of claim 32. More specifically, claim 32 recites:

A transmission unit, comprising:

a signal integrity supervisor configured to generate a response to a digital data stream having an anomalous condition, the signal integrity supervisor ***including a clock detector that includes a resistor-capacitor combination coupled to a current mirror, the resistor-capacitor combination configured such that a first output signal is triggered in response to a clock signal input that falls below a minimum frequency***, the signal integrity supervisor further configured to forward the response to the following:

control logic configured to reset the transmission unit, and

a line driver within the transmission unit, wherein the response powers down the line driver.

(Emphasis added).

Applicants respectfully submit that claim 32, as amended, is allowable over the cited art for at least the reason that neither *Seiichi* nor *Gunderson*, taken alone or in combination, discloses, teaches, or suggests a “transmission unit, comprising... a signal integrity supervisor configured to generate a response to a digital data stream having an anomalous condition, the signal integrity supervisor ***including a clock detector that includes a resistor-capacitor combination coupled to a current mirror, the resistor-capacitor combination configured such that a first output signal is triggered in response to a clock signal input that falls below a minimum frequency***” as recited in claim 32, as amended. More specifically, claim 32, as amended, is allowable for at least the reason that this claim includes allowable elements from claim 15.

B. Claim 34 is Allowable Over *Seiichi* in view of *Gunderson*

The Office Action indicates that claim 34 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A (“*Seiichi*”) in view of U.S. Patent Number 4,029,913 (“*Gunderson*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Gunderson* fails to disclose, teach, or suggest all of the elements of claim 34. More specifically, dependent claim 34 is believed to be allowable for at

least the reason that this claim depends from allowable independent claim 32. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

C. Claim 33 is Allowable Over *Seiichi* in view of *Gunderson* further in view of *Buer*

The Office Action indicates that claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 4,029,913 ("*Gunderson*") further in view of U.S. Patent Number 6,188,257 ("*Buer*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Gunderson* further in view of *Buer* fails to disclose, teach, or suggest all of the elements of claim 33. More specifically, dependent claim 33 is believed to be allowable over *Seiichi* and *Gunderson* for at least the reason that this claim depends from allowable independent claim 32. Because *Buer* fails to overcome the deficiencies of *Seiichi* and *Gunderson*, claim 33 is allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

D. Claims 37 and 38 are Allowable Over *Seiichi* in view of *Gunderson* further in view of *Nakatani*

The Office Action indicates that claims 37 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 4,029,913 ("*Gunderson*") further in view of U.S. Patent Number 6,130,619 ("*Nakatani*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Gunderson* further in view of *Nakatani* fails to disclose, teach, or suggest all of the elements of claims 37 and 38. More specifically, dependent claims 37 and 38 are believed to be allowable over *Seiichi* and *Gunderson* for at least the reason that these claims depend from allowable independent claim 32. Because *Nakatani* fails to overcome the deficiencies of

Seiichi and Gunderson, claims 37 and 38 are allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

E. Claim 26 is Allowable Over *Hatata* in view of *Shinozaki*

The Office Action indicates that claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 4,481,629 ("*Hatata*") in view of U.S. Patent Number 5,568,135 ("*Shinozaki*"). Applicants respectfully traverse this rejection for at least the reason that *Hatata* in view of *Shinozaki* fails to disclose, teach, or suggest all of the elements of claim 26. More specifically, claim 26 recites:

A circuit, comprising:
means for monitoring a digital data stream, wherein the means for monitoring a digital data stream comprises a signal integrity supervisor, ***the signal integrity supervisor including a clock detector including a resistor-capacitor combination coupled to a current mirror, the resistor-capacitor combination configured such that a first output signal is triggered in response to a clock signal input that falls below a minimum frequency***; and
means for generating an output signal in response to an anomalous condition in the digital data stream, the output signal including a fault recovery response to reset at least one component when the anomalous condition is detected, wherein the means for generating an output signal is responsive to a digital data stream having a number of consecutive data values of equal magnitude wherein the number of consecutive data values reaches a predetermined maximum value.

(Emphasis added).

Applicants respectfully submit that claim 26, as amended, is allowable over the cited art for at least the reason that neither *Hatata* nor *Shinozaki*, taken alone or in combination, discloses, teaches, or suggests a "circuit, comprising... means for monitoring a digital data stream, wherein the means for monitoring a digital data stream comprises a signal integrity supervisor, ***the signal integrity supervisor including a clock detector including a resistor-capacitor combination coupled to a current mirror, the resistor-capacitor combination configured such that a first output signal is triggered in response to a clock signal input***

that falls below a minimum frequency” as recited in claim 26, as amended. More specifically, claim 26, as amended, is allowable for at least the reason that this claim includes allowable elements from claim 15.

F. Claim 27 is Allowable Over *Hatata* in view of *Shinozaki* further in view of *Bartelink*

The Office Action indicates that claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A (“*Seiichi*”) in view of U.S. Patent Number 5,568,135 (“*Shinozaki*”) further in view of U.S. Patent Number 4,390,750 (“*Bartelink*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Shinozaki* further in view of *Bartelink* fails to disclose, teach, or suggest all of the elements of claim 27. More specifically, dependent claim 27 is believed to be allowable over *Hatata* and *Shinozaki* for at least the reason that this claim depends from allowable independent claim 26. Because *Bartelink* fails to overcome the deficiencies of *Hatata* and *Shinozaki*, claim 27 is allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

G. Claim 29 is Allowable Over *Hatata* in view of *Shinozaki* further in view of *Nakatani*

The Office Action indicates that claim 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A (“*Seiichi*”) in view of U.S. Patent Number 5,568,135 (“*Shinozaki*”) further in view of U.S. Patent Number 6,130,619 (“*Nakatani*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Shinozaki* further in view of *Nakatani* fails to disclose, teach, or suggest all of the elements of claim 29. More specifically, dependent claim 29 is believed to be allowable over *Hatata* and *Shinozaki* for at least the reason that this claim depends from allowable independent claim 26. Because *Nakatani* fails to overcome the deficiencies of *Hatata* and *Shinozaki*, claim

29 is allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

H. Claim 31 is Allowable Over *Hatata* in view of *Shinozaki* further in view of *Buer*

The Office Action indicates that claim 31 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 5,568,135 ("*Shinozaki*") further in view of U.S. Patent Number 6,188,257 ("*Buer*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Shinozaki* further in view of *Buer* fails to disclose, teach, or suggest all of the elements of claim 31. More specifically, dependent claim 31 is believed to be allowable over *Hatata* and *Shinozaki* for at least the reason that this claim depends from allowable independent claim 26. Because *Buer* fails to overcome the deficiencies of *Hatata* and *Shinozaki*, claim 31 is allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

/afb/

Anthony F. Bonner Jr. Reg. No. 55,012

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
Suite 1500
600 Galleria Parkway S.E.
Atlanta, Georgia 30339
(770) 933-9500